

1 **INTRODUCTION**

2 **Q. Please state your name, business address and present position.**

3 A. My name is Seth Schwartz. My business address is 1901 North Moore Street,
4 Suite 1200, Arlington, Virginia 22209. My position is President, Energy Ventures
5 Analysis, Inc.

6 **Q. Please state your relationship with PacifiCorp dba Rocky Mountain Power**
7 **(the “Company”).**

8 A. I am an independent expert who has been retained as a consultant by the
9 Company regarding the proposed closure of the Deer Creek mine, including
10 withdrawal from the 1974 Pension Trust and the contract for replacement coal
11 supply.

12 **QUALIFICATIONS**

13 **Q. Briefly describe your professional experience.**

14 A. I have been a principal of Energy Ventures Analysis (“EVA”) since its founding in
15 1981. EVA performs market analysis and management consulting for the U.S.
16 energy markets. We cover markets for coal, natural gas, oil and electric power.
17 Our clients are participants in the energy market, including producers, consumers,
18 transporters, investors and regulators. In addition to my corporate responsibilities,
19 I manage our coal consulting practice, including market studies, publications and
20 management consulting. Our market studies include analyses of coal supply,
21 demand and prices. Our consulting projects include management audits of fuel
22 procurement practices by electric power companies, both regulated and
23 unregulated. Our management audits have included projects for regulatory

24 agencies, interveners, and company management. I have testified as an expert
25 witness on coal markets and coal procurement practices in front of numerous state
26 public utility commissions as well as the Federal Energy Regulatory Commission
27 (“FERC”). My current resume is attached at Exhibit RMP____(SS-1).

28 **Q. Have you previously testified regarding the coal mining operations and coal**
29 **procurement practices of PacifiCorp?**

30 A. Yes. I directed a study of the coal supply operations and fuel procurement
31 practices of PacifiCorp following the merger of Utah Power & Light and Pacific
32 Power & Light in 1991 on behalf of the seven state public service commissions
33 and FERC as well as an update which was performed in 1995. This was a
34 comprehensive study of the management of the mining operations and coal supply
35 plan to all of PacifiCorp’s coal-fired power stations. I have also testified on behalf
36 of the Utah Office of Consumers Services in Docket No. 10-035-124 in 2011.

37 **Q. Do you have previous experience with the issues related to the multi-**
38 **employers pension plan and the National Bituminous Coal Wage Agreement**
39 **(“NBCWA”)?**

40 A. Yes. I have analyzed the costs and impacts of the NBCWA on the coal industry
41 and coal mining operations for over 30 years. I testified before the President’s
42 Commission on United Mine Workers of America Retiree Health Benefits (the
43 “Coal Commission”) in 1990, which led to the passage of the Coal Industry
44 Retiree Benefits Act of 1992. I have also testified in bankruptcy court on behalf of
45 Patriot Coal Company in 2013 regarding the costs of the NBCWA and the impact
46 on Patriot’s operations and its reorganization plans.

47

PURPOSE AND SUMMARY

48 **Q. What is the purpose of your testimony?**

49 A. My testimony describes the major issues involved in the Company’s decision to
50 close the Deer Creek mine and replace the coal with a new long-term contract
51 supplied by Bowie Resources (“Bowie”). These issues include the rising costs of
52 continued operation of the Deer Creek mine as an employer under the NBCWA
53 and the market for Utah coal which will replace the coal supply to the Utah power
54 plants.

55 **Q. What was the benefit to the Company’s customers of the Company having its
56 own captive production of coal to supply the Utah plants?**

57 A. For many years, the Company has operated its own coal mines in Utah (Deer
58 Creek and previous mines) to supply the Utah power plants (Huntington, Hunter
59 and Carbon). The Company was able to operate its own mines at costs similar to
60 the costs of operation by commercial coal suppliers in the Utah market. Operating
61 its own mines had a number of benefits to the Company and its customers,
62 including:

- 63 1) Stable supply of coal meeting the plant requirements at reasonable costs;
- 64 2) Low coal transportation costs to deliver coal to the Huntington and Hunter
65 power plants;
- 66 3) Reduced exposure to swings in coal prices based on market conditions;
- 67 4) Leverage with commercial coal suppliers in negotiating coal purchase
68 contracts.

69 **Q. What changes have occurred that no longer make it advantageous for the**
70 **Company to maintain its own captive coal mining operations?**

71 A. In recent years, the value of having captive coal supply for the Utah plants has
72 declined while the costs of maintaining this captive supply have increased.

73 **Q. Why has the value of a captive coal supply declined?**

74 A. Historically, the Utah coal market has had limited supply relative to the potential
75 demand. There was a small number of economic coal mines and a large potential
76 market, including local power plants as well as shipments to power plants in the
77 Eastern U.S. and exports to overseas markets. The major change in recent years
78 has been the decline in demand for Utah coal. Utah coal is no longer demanded in
79 Eastern markets and several local power plants have announced plans to close in
80 the near future. As a result, there is now excess supply of coal on the Utah market,
81 and the concern of potential shortages and price spikes in the commercial market
82 is much less than in the past.

83 **Q. Why have the costs of maintaining a captive coal supply increased?**

84 A. The Deer Creek coal mine is approaching the end of its reserve life. As the mine
85 depletes, the cost of production is expected to rise and the coal quality is expected
86 to decline. In addition, the costs of continuing to be a signatory employer under
87 the NBCWA and a participant in the multi-employer pension plan of the United
88 Mine Workers of America (“UMWA”) have substantially increased in recent years
89 and have a large risk of increasing much more in the future.

90 **Q. Please describe how your testimony is organized.**

91 A. First, I discuss the reasons for the increased cost to the Company of its continued

92 production and participation in the pension plan and the growing risk of higher
93 costs in the future. Second, I discuss the changes in the market for Utah coal and
94 the costs and benefits of purchasing coal from commercial suppliers compared to
95 continued captive coal production.

96 **INCREASED COST AND RISK OF PARTICIPATION IN THE**
97 **UMWA 1974 PENSION PLAN AND TRUST**

98 **Q. Please describe the UMWA 1974 Pension Plan and Trust.**

99 A. The UMWA 1974 Pension Plan and Trust (“1974 Pension Trust”) is a multi-
100 employer pension plan established to provide retirement benefits to eligible mine
101 workers who retire, who become disabled and to the eligible surviving spouses of
102 mine workers. The UMWA 1950 Pension Trust was merged into the 1974 Pension
103 Trust in 2007. The 1974 Pension Trust provides pension benefits to retired
104 members of the UMWA who are eligible based upon their years of signatory
105 service (work for a company which was a signatory of the NBCWA) regardless of
106 the identity of their former employer. As a multi-employer plan, eligible retirees
107 receive benefits from the 1974 Pension Trust based upon their qualifying
108 signatory service, regardless of whether their former employer is currently in
109 business or making payments to the 1974 Pension Trust.

110 **Q. Who are the signatory employers?**

111 A. The signatory employers are companies who have signed the current or previous
112 National Bituminous Coal Wage Agreement (“NBCWA”). Signatory employers
113 also include companies who have signed separate agreements with the UMWA

114 which incorporate the terms of the NBCWA (so-called “me too” agreements) and
115 are signatory to the terms of the 1974 Pension Trust agreement.

116 **Q. What is the National Bituminous Coal Wage Agreement?**

117 A. The NBCWA is negotiated between the Bituminous Coal Operators Association
118 (“BCOA”) and the United Mine Workers of America (“UMWA”). The NBCWA
119 governs the terms of employment of the hourly workers of the signatory
120 companies, including pay, benefits, work rules and retirement benefits. The
121 current 2011 NBCWA was effective on July 1, 2011 and will expire December 31,
122 2016.

123 **Q. Is Energy West a signatory of the current NBCWA?**

124 A. No. Energy West has not signed the 2011 NBCWA. The UMWA employees of
125 Energy West (at the Deer Creek mine and the Hunter Preparation Plant) have been
126 working without a contract since the last contract expired on January 2, 2013.

127 **Q. Is Energy West still required to make contributions to the 1974 Pension
128 Trust?**

129 A. Yes. While the last labor contract has expired, Energy West is still required to
130 contribute to the 1974 Pension Trust. Based upon prior court rulings,¹ as a
131 previous signatory to the 1974 Pension Trust documents, Energy West is obligated
132 to continue to contribute at the rates set by the NBCWA whether or not Energy
133 West is a signatory to successor NBCWA agreements.

134 **Q. How are contribution rates to the 1974 Pension Trust established?**

135 A. The contribution rates are established by agreement of the BCOA and the UMWA

¹ See *Holland v. Freeman United Coal Mining Co*, 574 F. Supp. 2d 116 (2008), United States District Court, District of Columbia, Civil Action Nos. 07-0490 and 07-1050.

136 in the NBCWA and its successor agreements. Energy West is bound to make
137 contributions at the rates established in the NBCWA.

138 **Q. What is the current contribution rate to the 1974 Pension trust?**

139 A. For the term of the 2011 NBCWA (from July 1, 2011 through December 31,
140 2016), the contribution rate was fixed at the rate of \$5.50 per hour worked for all
141 UMWA employees employed prior to January 1, 2012. This is a very substantial
142 cost to the signatory employers. The standard wage rate for the highest-paid
143 UMWA employee as of July 1, 2011 was \$25.415 per hour, so the contribution to
144 the 1974 Pension Trust is over 20 percent of the regular payroll rate.

145 **Q. Why is the contribution rate so expensive?**

146 A. Because of the nature of the multi-employer plan and the fact that the number of
147 contributing employers has been declining over time. In a multi-employer plan,
148 the current employers are not making contributions based upon the cost of
149 providing pensions to their own current and future retirees. The pensions for all
150 eligible UMWA retirees (and surviving spouses) are included in the Trust and the
151 contributions from current employers are supposed to be set at the level needed to
152 pay for all of the eligible retirees, not just the individual employer's retirees.

153 In the case of the coal industry, UMWA coal production and employment
154 has been declining over time. Because the cost of coal production with UMWA
155 employees has been greater than the cost of production with non-union employees
156 (due to wage rates, very high benefit costs, and lower productivity due to UMWA
157 work rules), no new coal mines developed since the 1980s have signed the
158 NBCWA. As existing UMWA mines have depleted and closed, the number of

159 active UMWA employees and coal production from UMWA mines has declined.
160 Former signatory employers have closed and some have filed bankruptcy. As the
161 coal production and contributions from signatory employers have declined, the
162 cost of contributions for the remaining employers has escalated rapidly.

163 **Q. What has happened to the amount of coal production by companies who are**
164 **contributing to the 1974 Pension Trust?**

165 A. Just prior to the passage of the Coal Industry Retiree Benefit Act of 1992 (which
166 was a Federal law designed to address the funding shortfalls for UMWA retiree
167 medical benefits), signatory coal production was 285 million tons in 1991.² The
168 level of signatory UMWA production had been declining from a peak of 423.7
169 million tons in 1970, when signatory production was almost 70 percent of total
170 U.S. coal production. Since the passage of the 1992 Coal Act, signatory coal
171 production has fallen sharply as companies have closed UMWA coal mines and
172 have gone out of business. From 1998 to 2013, signatory coal production has
173 fallen by two-thirds, from 217 to 76 million tons, as shown on Exhibit
174 RMP__(SS-2). Signatory coal production is on pace to fall again in 2014, with
175 mine closures announced in Alabama and West Virginia.

176 **Q. Please provide a history of the contribution rates to the 1974 and 1950**
177 **Pension Trusts.**

178 A. The historical contribution rates from 1975 to 2014 to the 1974 and 1950 Pension
179 Trusts are shown on Exhibit RMP__(SS-3). The contribution rates to the 1950
180 Pension Trust were set in dollars per ton produced, but the exhibit shows the rates

² US House of Representatives, Committee on Ways and Means, "Development and Implementation of the Coal Industry retiree Health Benefit Act of 1992", page 130.

181 converted to equivalent dollars per hour worked. The contributions to the 1950
182 Pension Trust ceased in 1987 after the 1950 Pension Trust was fully funded. The
183 1950 Pension Trust was merged into the 1974 Trust in 2007. The contribution rate
184 to the 1974 Pension Trust was in the range of \$0.60 - \$1.20 per hour worked
185 (including the equivalent contribution rate per ton) from the plan inception
186 through 2001. In the 2002 NBCWA, the contribution rate was reduced to zero.
187 However, a substantial deficit in the Trust required a resumption of contributions
188 in the 2007 NBCWA at the rate of \$2.00 per hour, growing to \$5.00 per hour by
189 the end of the contract. In the 2011 NBCWA, contribution rates were fixed at
190 \$5.50 per hour for the term of the contract through the end of 2016.

191 **Q. What has happened to the financial condition of the 1974 Pension Trust?**

192 A. The financial condition of the 1974 Pension Trust has deteriorated dramatically
193 since the start of the 2007 NBCWA. At the valuation date of June 30, 2006, the
194 market value of the assets was \$6.0 billion and the present value of the vested
195 benefits was \$7.1 billion, for a deficit of \$1.1 billion (the value of the unfunded
196 vested benefits). However, as shown on Exhibit RMP___(SS-4), the deficit has
197 skyrocketed since 2006 to \$5.5 billion as of the last valuation date of June 30,
198 2013.

199 **Q. What are the causes of the large increase in the deficits in the 1974 Pension**
200 **Trust?**

201 A. It has been a combination of an increase in the present value of the vested benefits
202 and a decline in the market value of the plan assets. The present value of the
203 vested benefits has increased from \$7.1 billion on June 30, 2006 to \$9.6 billion on

204 June 30, 2013 due to benefit increases and changes in actuarial assumptions,
205 principally the lower interest rate used to discount future benefits to a present
206 value (this change is due to lower interest rates and expected earnings for the plan
207 assets). The market value of the plan assets has fallen from \$6.0 billion on June
208 30, 2006 to \$4.1 billion on June 30, 2013 due to the decline in the market value of
209 the plan investments in 2008 and 2009 and the fact that benefit payments have
210 exceeded contributions and investment earnings.

211 **Q. How do Company contributions to the 1974 Pension Trust compare to the**
212 **cost of benefits?**

213 A. For the most recent year ended June 30, 2013, total contributions were \$121.5
214 million (including \$6.2 million of withdrawal payments), while the cost of
215 benefits paid and plan expenses were \$609.6 million. The annual income of the
216 plan assets is not enough to fund the difference between the employer
217 contributions and the cost of the benefits. In the most recent year, the earnings and
218 market appreciation of the plan investments were \$377.1 million, so the value of
219 the plan assets declined by over \$100 million. The decline in the value of the plan
220 assets would have been even larger except for the fact that the return on plan
221 assets was \$62.4 million greater than expected. As the value of the plan assets is
222 depleted to pay the current benefits, the earnings on the plan assets will decline
223 further, exacerbating the shortfall.

224 **Q. What is the impact of the funding deficit on the amount of future**
225 **contributions by employers like Energy West to the 1974 Pension Trust?**

226 A. Under the federal Pension Protection Act of 2006 (“PPA”), the actuary for a

227 multi-employer pension plan must certify the funded status of a plan annually. For
228 the plan year beginning July 1, 2011, the actuary for the 1974 Pension Trust
229 certified that the plan was in “seriously endangered status” for the first time. The
230 PPA requires that BCOA and the UMWA adopt a funding improvement plan to
231 avoid a funding deficiency for any plan year and improve the plan’s funded status
232 by at least 20 percent over a 15-year period.³ The funding improvement plan was
233 adopted on May 25, 2012 and was updated on April 26, 2013. The funding
234 improvement plan will require contributions by participating employers to more
235 than double in 2017 (after the end of the current NBCWA) to \$13.20 per hour and
236 continue to increase rapidly to a rate of \$26.00 per hour by 2022 and remain at
237 this level thereafter.⁴ The 1974 Pension Trust’s financial condition has further
238 deteriorated and it is now considered to be in “critical” status for plan year
239 beginning July 1, 2014. A new “rehabilitation plan” will be required to be adopted
240 no later than May 2015 which will likely require even higher future contribution
241 rates.

242 **Q. What would be the likely impact of this required increase in contributions on**
243 **the cost of production for the contributing employers?**

244 A. The required increase would have a substantial increase in costs for the signatory
245 employers. Production at signatory UMWA mines has already been declining
246 steadily as shown on Exhibit RMP___(SS-2). The cost for contributions to the
247 1974 Pension Trust at \$26.00 per hour worked would equal about \$7.00 per ton at

³ Annual Funding Notice from the Trustees of the UMWA Health and Retirement Funds, October 25, 2013.

⁴ This schedule assumes no cuts in benefits. If benefits were cut to the maximum extent permitted by law, the contribution rate would rise to \$24.90 per hour by 2022 instead of \$26.00.

248 the average UMWA mine. This increase would make more UMWA mines
249 uneconomic and likely to close.

250 **Q. What would be the impact on the financial status of the 1974 Pension Trust if**
251 **more UMWA mines were to close?**

252 A. It is likely that the 1974 Pension Trust would enter what is popularly known as a
253 “death spiral”, where declining production would force the remaining producers
254 to contribute at even higher hourly rates, which would in turn force more mines to
255 close. The remaining signatory employers would likely close their UMWA mines
256 and seek to withdraw from the 1974 Pension Trust.

257 **Q. How can an employer limit its exposure to the future costs of the 1974**
258 **Pension Trust?**

259 A. The only way for a current signatory employer to limit the future financial
260 obligations to the 1974 Pension Trust is to close its UMWA operations (laying off
261 all UMWA employees) and withdraw from the Trust. Previous court rulings have
262 held that the existing signatory employers must continue to make contributions to
263 the 1974 Pension Trust at the rates established under the NBCWA even if the
264 employer is no longer a signatory to the agreement.

265 **Q. What happens when an employer withdraws from the 1974 Pension Trust?**

266 A. Under the terms of the Employee Retirement Income Security Act (“ERISA”), an
267 employer must pay withdrawal liability equal to its proportionate share of the
268 unfunded vested benefits as of the last valuation date. The employer’s liability is
269 calculated based upon its share of the contributing hours worked over the
270 preceding five years times the total unfunded vested benefits.

271 **Q. What is the withdrawal liability for Energy West if it closes the Deer Creek**
272 **mine?**

273 A. Based upon the last valuation date of June 30, 2013, the Company had an
274 estimated withdrawal liability of \$125,615,617 if it had withdrawn from the 1974
275 Pension Trust prior to June 30, 2014. This valuation is an estimate provided by the
276 Trustees at the request of Energy West, based upon the unfunded benefits of \$5.4
277 billion and the Company's share of the total signatory hours worked over the last
278 five years of 2.32 percent. A new valuation of the unfunded vested benefits and
279 the withdrawal liability as of June 30, 2014 has not been prepared by the Trustees
280 at this time, so the current withdrawal liability is not known for certain.

281 **Q. How would the withdrawal liability be paid?**

282 A. The withdrawn employer has the obligation to make annual payments equal to the
283 highest contribution rate (in dollars per hour) over the previous 10 years times the
284 highest average annual contribution base units (annual signatory hours worked
285 over the highest 3-year period in the previous 10 years). The withdrawn employer
286 also has the option to make the withdrawal payment in a lump sum in lieu of the
287 annual payments. Annual payments would continue indefinitely until the 1974
288 Pension Trust has satisfied all of its obligations to beneficiaries.

289 **Q. What has happened to the calculation of the withdrawal liability of Energy**
290 **West over recent years?**

291 A. After learning of the funding deficit in September 2010, Energy West has
292 requested that the Trustees provide a calculation of its withdrawal liability
293 annually. In that time, the withdrawal liability has increased from \$85.9 million to

294 \$125.6 million, as shown on Exhibit RMP____(SS-6). The reason for the increase
295 in liability has been the increase in the unfunded vested benefits in the Trust, as
296 described earlier. The share of signatory hours worked by Energy West has been
297 stable over this period.

298 **Q. What is likely to happen to Energy West's withdrawal liability if the**
299 **Company delays withdrawal until a future date?**

300 A. It is highly likely that Energy West's withdrawal liability will continue to rise
301 significantly.

302 **Q. Why?**

303 A. The amount of coal produced by other signatory companies is certain to decline as
304 other companies close uneconomic coal mines. As a result, the share of signatory
305 hours worked by Energy West will increase, so Energy West's share of the
306 withdrawal liability will be higher. Further, the lower amount of production will
307 reduce the annual contributions to the Trust, increasing the unfunded deficit.
308 Finally, it is possible that some of the other signatory companies will be unable to
309 continue to make contributions or withdrawal payments due to their weak
310 financial condition, which would leave a greater share of the liability with Energy
311 West.

312 **Q. What is likely to happen to Energy West's withdrawal payment obligation if**
313 **it delays withdrawal until after 2016?**

314 A. If Energy West withdraws prior to 2017, the highest contribution rate which
315 would be multiplied by the annual hours worked would be \$5.50 per hour. Based
316 on the latest funding improvement plan, the contribution rate will increase to at

317 least \$13.20 per hour, which would more than double the annual withdrawal
318 payment. The annual payment obligation is likely to increase significantly in 2017
319 after the 2011 NBCWA expires.

320 **Q. Why do you expect coal production by other UMWA mines to decline in the**
321 **future?**

322 A. Several large UMWA mines have already closed in 2014 in Alabama, Virginia and
323 West Virginia. Producers have provided WARN Act⁵ notices at a number of other
324 mines and these are likely to close in the near future. Weak prices for
325 metallurgical coal have jeopardized the viability of several other large mines
326 which have disproportionately more employees, due to difficult mining
327 conditions. Further, the remaining mines will become much less economic when
328 the large increase in contributions to the 1974 Pension Trust starts in 2017.

329 **Q. Who are the signatory coal producers contributing to the 1974 Pension**
330 **Trust?**

331 A. I have calculated the signatory coal production by parent company in 2013, which
332 is presented in Exhibit RMP___(SS-7). The largest coal producer was Consol
333 Energy (its subsidiaries Consolidation Coal and McElroy Coal). Consol sold these
334 mines in late 2013 to Murray Energy, the parent company of Ohio Valley
335 Resources, another signatory producer. The combination makes Murray Energy
336 the largest signatory producer, with over 45 percent of all of the 2013 production,
337 all from six highly-productive mines. Excluding Energy West, there were only six
338 other signatory coal producers in 2013.

⁵ The Worker Adjustment and Retraining Notification Act, which requires 60 days advance notice prior to layoffs which exceed 50 employees.

339 **Q. Who is the second-largest signatory coal producer?**

340 A. The second-largest signatory producer was Patriot Coal (including its subsidiaries
341 Eastern Associated Coal, Highland Mining and others). Patriot filed for Chapter
342 11 bankruptcy in 2012, citing high operating costs and long-term liabilities,
343 especially associated with the NBCWA. Patriot emerged from Chapter 11 in late
344 2013, but has continued to lose money. In 2014, Patriot has closed or idled two of
345 its remaining UMWA mines and given WARN notice at another mine. In its
346 bankruptcy, Patriot announced that it had reached an agreement with the UMWA
347 to limit its future contributions, although the terms were not made public.

348 **Q. What is the financial condition of the other signatory coal producers?**

349 A. The next-largest signatory coal producers were subsidiaries of Walter Energy and
350 Alpha Natural Resources. In 2014, Walter closed the large North River UMWA
351 mine. Walter is highly-leveraged due to a large acquisition of Western Coal in
352 2011 at the peak of the metallurgical coal market and is now in precarious
353 financial condition. Walter's debt has been trading at about 50 percent of its face
354 value and its common stock has fallen to only 5 percent of its peak value in 2011.
355 Alpha also incurred a large debt in a 2011 acquisition of Massey Energy and its
356 common stock is also just 5 percent of its peak value in 2011. Alpha has
357 announced the closure of its remaining signatory Virginia mines at Dickenson-
358 Russell Coal Company and has stopped development at its large Emerald mine.
359 The next-largest producer, Cliffs Natural Resources, has two UMWA mines, both
360 producing metallurgical coal, and has reported losses at these mines since they
361 were purchased in 2007. Cliffs has recently announced its intention to sell these

362 mines and exit the coal business. Finally, Mechel idled all of the UMWA mines at
363 its Bluestone Coal subsidiary this year. Mechel has also announced its intention to
364 sell its coal mines and its credit rating has fallen to a point where bankruptcy is
365 likely.

366 **Q. Based on these conditions, what do you expect is likely to happen if Energy**
367 **West continues to operate the Deer Creek mine?**

368 A. It is likely that the cost of operating the Deer Creek mine will increase
369 significantly after 2016 as the contribution rates to the 1974 Pension Trust are
370 increased. Further, there is a significant possibility of a national strike by the
371 UMWA in 2017 in an attempt to spur Congress to provide funding for the Pension
372 Trust. Finally, when the Deer Creek mine is closed after depletion of its coal
373 reserves, Energy West's withdrawal liability is expected to be much higher due to
374 the increased contribution rates under the Funding Improvement Plan.

375 **Q. Is it possible that some events in the future will cause the cost to Energy West**
376 **to decline?**

377 A. Unforeseen events are always possible. The UMWA is actively lobbying Congress
378 to provide federal funding for the 1974 Pension Trust. This does not appear likely
379 given the budget deficit and is not an event the Company can count on. The value
380 of the Trust's investment assets could increase faster than projected by the
381 actuaries, however, this is unlikely given the current deficit which is depleting the
382 assets.

383 **Q. Why should the Company withdraw now instead of waiting for Congress to**
384 **fund the deficits in the 1974 Pension Trust?**

385 A. It would be very risky for the Company to hope that Congress will bail out the
386 1974 Pension Trust, as any federal action is uncertain. What is certain is that the
387 cost to the Company will continue to rise if it does not withdraw from the Trust.

388 **THE MARKET FOR UTAH COAL AND THE NEW COAL SUPPLY CONTRACT**
389 **TO REPLACE DEER CREEK**

390 **Q. If the Company does not continue to produce coal at Deer Creek, how will it**
391 **supply its Utah coal-fueled power plants?**

392 A. The Company has the choice of producing its own captive coal or supplying the
393 Utah plants from coal purchased in the commercial market. Thus, the decisions
394 facing the Company are whether to operate or close the Deer Creek mine and, if it
395 is closed, whether to replace the coal on the commercial market under a new long-
396 term contract at the present time or to purchase coal on the short-term market in
397 the future. The factors to consider in these decisions include the expected cost of
398 purchasing coal relative to producing coal, the current and expected future coal
399 market conditions, and the reliability of supply of coal at a quality which can be
400 consumed by the Utah plants.

401 **Q. Please provide an overview of the Utah coal market.**

402 A. The Utah coal market is part of the broader Rockies coal region, which includes
403 coal produced in the states of Utah and Colorado as well as parts of Wyoming,
404 Montana and New Mexico. This region includes coals produced in various coal
405 basins, with some degree of overlapping sales among the coal basins in these

406 states. Utah coal is produced in several different coal fields (including active
407 operations in the Wasatch Plateau, Book Cliffs and Alton coal fields) which
408 compete with each other in the marketplace.

409 **Q. Where is Utah coal sold?**

410 A. The largest market for Utah coal is at power plants and industrial customers
411 located in Utah or nearby states (including Nevada, California and Idaho) where
412 Utah coal has a transportation advantage over other potentially competitive
413 sources of coal. Utah coal used to be sold to Eastern coal markets but those sales
414 have virtually disappeared.

415 **Q. Why have sales to markets in the Eastern U.S. declined?**

416 A. In part, because of lower demand for coal in the Eastern U.S., but also because
417 Utah coal has become less competitive over time with other sources of similar-
418 quality coal (bituminous, low-sulfur) delivered to Eastern customers, such as
419 Rockies coal from the states of Colorado and Montana as well as coal from
420 Appalachia. Sales of Utah coal to Eastern power plants have fallen from 3.8
421 million tons in 2008 to near zero (5,152 tons) in 2013.

422 **Q. What are the other markets for Utah coal mines?**

423 A. The major market for Utah coal is at local power plants and industrial customers.
424 In 2013, sales of Utah coal to power plants in Utah, Nevada and California were
425 13.2 million tons, down from 18.2 million tons in 2008. PacifiCorp purchased 7.3
426 million tons for its Utah plants in 2013. The other major markets are the large
427 Intermountain Power Project (“IPP”) power plant in Utah, the North Valmy and
428 Reid Gardner power plants in Nevada, several cogeneration plants in California,

429 and a number of industrial customers in Utah, Nevada, California, and Idaho. In
430 2013, Utah coal sales to these other power plants were about 5.9 million tons
431 (including 5.2 million to IPA) and sales to industrial consumers were 2.6 million
432 tons. In addition, some Utah coal (about 0.7 million tons in 2013) is exported to
433 overseas markets through ports in California.

434 **Q. What is likely to happen to demand for Utah coal at these other local**
435 **markets?**

436 A. The demand for Utah coal will decline at other local power plants because most of
437 these plants have announced dates when they will close. The Reid Gardner power
438 plant will close units 1-3 at the end of 2014 and the remaining unit at the end of
439 2017. PacifiCorp will close the Carbon power plant in 2015. NV Energy's most
440 recent Integrated Resource Plan, filed in 2013, reflects retirement dates for the
441 North Valmy units in 2021 and 2025.⁶ All of the plants in California have
442 announced they will stop burning coal by the end of 2015. Finally, IPP has
443 announced it will stop burning coal after its contracts with the California
444 participants expire in 2027. At that point, PacifiCorp is likely to be the only
445 consumer of Utah coal in power plants, along with the industrial customers and
446 the export market.

447 **Q. Why has Utah coal become less competitive with other sources of similar**
448 **coal?**

449 A. Principally due to the depletion of coal mines in Utah over time and the increasing
450 costs to mine the remaining coal reserves. Utah coal production grew in the 1970s
451 and 1980s with the development of new mines to supply growing markets at local

⁶ NV Energy Northern Service Territory 2013 Integrated Resource Plan, Volume 11, page 144.

452 power plants, Eastern customers for low-sulfur bituminous coal and exports to
453 Asia. Production from these mines peaked in 1996 at close to 28 million tons per
454 year. Production remained fairly steady over the next decade, but has declined
455 since then as lower-cost coal reserves at the older mines were depleted. As shown
456 on Exhibit RMP___(SS-8), total Utah coal production has declined significantly
457 over the last 8 years, falling from 26.0 million tons in 2006 to 16.6 million tons in
458 2013.

459 **Q. What has happened to coal production by mine in the state of Utah?**

460 A. Utah coal production by mine for the years 2006 - 2013 is shown on Exhibit
461 RMP___(SS-8). The Aberdeen, Crandall Canyon and Bear Canyon #3 mines have
462 depleted and closed. The Emery and Horizon mines have been closed for
463 economic reasons. Production has declined at the large Sufco, Dugout Canyon,
464 West Ridge and Deer Creek mines due to depletion of reserves and more difficult
465 mining conditions. Two new mines have been developed to partially replace the
466 decline from existing mines: the Lila Canyon mine and the Coal Hollow mine in
467 southern Utah (which is the only surface mine in Utah).

468 **Q. What is the outlook for Utah coal supply?**

469 A. The supply of Utah coal will continue to decline. Two of the large remaining coal
470 mines, West Ridge and Deer Creek, are facing depletion and closure in the near
471 future. West Ridge is expected to close in 2016. Deer Creek would deplete all of
472 its remaining reserves in 2019, but is being closed earlier. Arch Coal, the former
473 owner of Canyon Fuels (which was sold to Bowie Resources in 2013), reported
474 limited reserve life at both the Dugout Canyon and Skyline mines, although these

475 lives could be extended with new coal leases. While Murray Energy is planning to
476 replace the depleting West Ridge mine with the Lila Canyon mine, the closure of
477 the Deer Creek mine will significantly reduce the supply of Utah coal.

478 **Q. How much coal does PacifiCorp need to supply its Utah power plants?**

479 A. Historically, PacifiCorp has consumed between 7.1 and 8.4 million tons per year
480 of Utah coal at its Hunter, Huntington and Carbon power plants (this includes the
481 coal consumed at the Hunter plant for the share not owned by PacifiCorp). With
482 the closure of the Carbon power plant in 2015, the projected coal requirements for
483 the Hunter and Huntington plants is projected to be about 7.3 million tons per
484 year.

485 **Q. With the closure of the Deer Creek mine, what will be the likely sources of
486 coal to supply the Hunter and Huntington power plants?**

487 A. The Hunter and Huntington plants can only deliver coal by truck and are not
488 located near a railroad. The economics of coal transportation make truck delivery
489 over long distances expensive, and the economic sources of coal for these plants
490 will likely be limited to the five nearby coal mines which can deliver coal by
491 truck within a radius of less than 70 miles. These mines are the Sufco, Skyline
492 and Dugout Canyon mines owned by Bowie Resources, the Castle Valley mine
493 owned by Rhino Energy, and the Lila Canyon mine owned by Murray Energy
494 (which is replacing the depleting West Ridge mine). These mines are likely to
495 produce 13 - 15 million tons per year through 2018, with about half of the coal
496 supplying the PacifiCorp power plants.

497 **Q. What is the outlook for Utah coal supply after 2019?**

498 A. The supply of Utah coal is uncertain after 2019. Based upon the current assigned
499 reserves, the Skyline and Dugout Canyon mines would likely be closed in this
500 time period. While Bowie has announced plans to lease additional coal reserves
501 and maintain production, these plans could change based upon market conditions
502 and the ability to obtain these coal leases. It is possible that Utah coal supply
503 could be significantly smaller in this time period.

504 **Q. What is likely to happen to the market price of Utah coal after the Deer
505 Creek mine is closed?**

506 A. The Deer Creek mine has supplied a large share of the Utah market, producing 15
507 percent - 20 percent of total Utah coal over recent years. The closure of the Deer
508 Creek mine will result in PacifiCorp replacing about 2.6 million tons per year
509 from other Utah coal suppliers (3.2 million tons of production less the reduced
510 demand due to closing the Carbon plant). This is likely to result in an increase in
511 the market price for Utah coal in the near term.

512 **Q. Does your company (EVA) prepare a regular forecast of coal market prices?**

513 A. Yes, EVA has been preparing forecasts of U.S. coal market prices for over 30
514 years. We publish regular forecasts of U.S. coal supply, demand and prices for
515 short-term (3 years) and long-term (25 years) markets. Many participants in the
516 U.S. coal markets subscribe to our price forecasts, including power companies,
517 coal producers, coal transportation companies and investors in the coal industry.
518 We call our coal market forecast reports "COALCAST".

519 **Q. How frequently do you publish your COALCAST forecast of coal market**
520 **prices?**

521 A. We publish our forecast of long-term coal prices once per year in September. We
522 publish our forecast of short-term market prices quarterly.

523 **Q. Have you provided your forecast of Utah coal market prices to PacifiCorp**
524 **for its use in this analysis?**

525 A. Yes, PacifiCorp has been a subscriber to our coal market price forecasts for a
526 number of years and we provided our latest forecast of Utah coal prices to
527 PacifiCorp in early September. This is the same forecast of market prices which
528 we publish for use by all of our subscribers.

529 **Q. What is your forecast of Utah coal prices?**

530 A. Our forecast of Utah coal prices is for coal with a heat content of 11,800 Btu per
531 pound loaded FOB rail in the area of Price, Utah. The 2014 long-term forecast is
532 shown on Exhibit RMP___(SS-9). We estimate current market prices to be \$37 -
533 \$38 per ton. We project that these prices will increase to over \$42 per ton by 2016
534 due to closures of Utah coal mines (Deer Creek and West Ridge). We project that
535 Utah coal prices will continue to rise over time, reaching \$46 per ton by 2020 and
536 reaching \$50 per ton by 2024.

537 **Q. Are these prices delivered to the Hunter and Huntington power plants?**

538 A. No, this is a forecast of market prices in the area of Price, Utah. To determine the
539 projected market price delivered to the Hunter and Huntington power plants, one
540 would need to add an estimate of the transportation costs from these mines to each
541 power plant.

542 **Q. Why do you project that Utah coal prices will continue to increase in the**
543 **future?**

544 A. The reasons for the increase in Utah coal prices in our forecast are mining cost
545 increases due to inflation in factor costs (labor, supplies, etc.) and depletion of
546 reserves requiring more difficult mining conditions.

547 **Q. Has EVA considered the potential impact of new regulations on carbon**
548 **dioxide emissions from existing power plants?**

549 A. The prospect for regulation of carbon dioxide emissions from existing power
550 plants is uncertain. The Environmental Protection Agency (“EPA”) has proposed
551 new regulations called the “Clean Power Plan”, which are scheduled to take effect
552 beginning in 2020. EPA’s public comment period closed on December 1, 2014,
553 and plans to issue final rules in June 2015. Following the final rules, each state
554 will have to prepare a State Implementation Plan (“SIP”) for approval by EPA.
555 The proposed regulations are already subject to litigation challenging EPA’s
556 statutory authority to implement the broad scope of the regulations, which would
557 affect not just emissions from existing power plants, but also the dispatch of these
558 plants, construction of renewable energy power plants and energy efficiency
559 programs. Given the uncertainty, EVA has prepared an alternate case forecast of
560 coal prices which would model the impacts of EPA’s proposed rules on coal
561 markets.

562 **Q. What is the projected impact of the proposed new carbon dioxide regulations**
563 **on EVA’s forecast of Utah coal markets and prices?**

564 A. Because many of the power plants using Utah coal are scheduled to retire by 2020

565 anyway without the new regulations, they are projected to have a modest impact
566 on the market for Utah coal. EVA projects that the principal impact will be the
567 acceleration of the projected retirement of the Intermountain power plant from
568 2027 to 2020. EVA forecasts that this would result in a lower market price for
569 Utah coal during this time period, but that the impacts will disappear by 2026.
570 The comparison between the forecast of Utah coal prices under the No Carbon
571 Case and the Carbon Case is shown on Exhibit RMP___(SS-10).

572 **Q. In your opinion, is it prudent for PacifiCorp to enter into a long-term**
573 **contract for Utah coal to replace the supply from the Deer Creek mine prior**
574 **to closing the mine?**

575 A. Yes. The closure of mines in Utah, including the Deer Creek mine (whether
576 closed now or in 2019), will reduce the supply of coal in the Utah market and is
577 likely to result in higher coal market prices. If PacifiCorp were to wait to purchase
578 replacement coal until after closing the mine, it is likely that the Company would
579 pay higher prices for coal at that time.

580 **Q. As you are projecting there will be ample supply of Utah coal due to other**
581 **demand declining, why is it important for PacifiCorp to have a significant**
582 **portion of its coal purchased under long-term contract rather than just**
583 **purchase the coal on the market under short-term purchases?**

584 A. After the closure of the Deer Creek mine, there will be only three producers of
585 Utah coal: Bowie Resources, Murray Energy and Rhino Energy. Without the
586 Deer Creek mine, PacifiCorp would not be able to supply its coal demand without
587 purchasing large volumes from Bowie. This would give Bowie the ability to price

588 discriminate and charge PacifiCorp a higher price than the prevailing market price
589 for Utah coal to other customers. By committing all of its coal requirements at the
590 Huntington plant under a new long-term contract with Bowie at fixed prices,
591 PacifiCorp will continue to have competition among the remaining Utah coal
592 producers to supply the Hunter plant, preventing Bowie from being able to
593 exercise market power and charge higher prices.

594 **Q. What will be the impact of closing the Deer Creek mine on the coal price for**
595 **the Hunter plant after its existing long-term contract expires after 2019?**

596 A. The Deer Creek mine was scheduled to deplete and close by 2019 in any event.
597 Thus, closing the mine earlier will not affect the market price for the Hunter plant
598 after 2019.

599 **Q. Have you reviewed the Huntington CSA between PacifiCorp and Bowie**
600 **Resource Partners for the purchase of coal for the Huntington power plant?**

601 A. Yes.

602 **Q. Please summarize the principal terms of the new coal supply contract.**

603 A. The new coal supply contract with Bowie is to supply the coal requirements of the
604 Huntington power plant, with a minimum of [REDACTED] tons per year and a
605 maximum of [REDACTED] tons per year. The term of the contract is for 15 years from
606 2015 through 2029. The coal prices are fixed for every year of the contract, with
607 the price for the first [REDACTED] tons per year starting at \$[REDACTED] per ton delivered to
608 Huntington in 2015, increasing in fixed amounts to reach \$[REDACTED] per ton in the
609 last year of the contract. The price for all coal in any year in excess of [REDACTED]
610 tons is discounted at a price of \$[REDACTED] per ton below the price for the first [REDACTED]

611 tons. The source of coal can be from Bowie's mines as well as from third-party
612 sources. The average coal quality specifications are [REDACTED]

613 [REDACTED]

614 **Q. How does the new Bowie contract price compare to your forecast of Utah**
615 **market prices?**

616 A. I have evaluated the new Bowie contract price and compared it to our forecast of
617 Utah coal market prices on a delivered basis to the Huntington power plant at the
618 same [REDACTED] per pound heat content. To adjust EVA's market price forecast to
619 an equivalent basis, I have added the typical transportation cost from the Savage
620 Coal Terminal to the Huntington power plant, which is estimated to be about
621 \$[REDACTED] per ton in 2014, escalating through 2029. I adjusted the market price
622 forecast on a delivered basis to equal the same heat content of [REDACTED] Btu per
623 pound. I did not make a further adjustment for the fact that the Bowie contract is
624 for lower-sulfur coal ([REDACTED] than EVA's forecast (1.0 percent sulfur).
625 For the Bowie contract, I used the delivered price stated in the contract, with the
626 contract volumes and transportation cost adjustment as projected by the Company.

627 **Q. What was the result of your analysis?**

628 A. The projected delivered market price compared to the fixed prices under the
629 Bowie contract are shown on Exhibit RMP___(SS-11). The 2015 delivered price
630 of the Bowie contract starts at \$[REDACTED] per ton, which is very similar to our forecast
631 of delivered coal prices. EVA's projection of Utah coal prices is that they will
632 escalate at a much faster rate than the very low price escalation rate fixed in the
633 Bowie contract ([REDACTED] annual escalation rate through 2029 plus truck

634 transportation adjustments). As a result, we project that the new Bowie contract
635 price will be significantly below the market price over the term of the contract.

636 **Q. Based upon your review, do you believe it was prudent for the Company to**
637 **enter into the new long-term coal contract with Bowie?**

638 A. Yes.

639 **Q. Why?**

640 A. The new contract provides a secure supply of local Utah coal which will meet the
641 full requirements of the Huntington power plant and replace the coal which would
642 have been supplied by the Deer Creek mine. The initial delivered price is at the
643 current market price for similar coal and the price escalation terms over the life of
644 the contract are very favorable to PacifiCorp and well below our forecast of future
645 coal market prices. The coal quality is attractive, as it is very low sulfur, which
646 will reduce plant operating costs. PacifiCorp has included provisions in the Bowie
647 contract which would protect it against being obligated to continue to purchase
648 coal in the event that new government laws, rules or regulations affected the
649 ability to consume at least [REDACTED] tons per year of coal at the Huntington power
650 plant.

651 **Q. Does this conclude your direct testimony?**

652 A. Yes, it does.